Taller # 2 – Proyecto Integrador 1 – Sergio Andrés Córdoba Muriel

1. **Repositorio**: https://github.com/sergiocordobam/Machine-Learning
2. **Archivo train.ipynb (modelo InceptionV3):**

```
base_model = tf.keras.applications.InceptionV3(
    include_top=False,
    weights="imagenet",
    input_tensor=None,
    input_shape=(150,150,3),
    pooling=None,
    classes=1000,
    classifier_activation="softmax",
)

base_model.trainable = False
```

```
Downloading data from https://storage.googleapis.com/tensorflow/keras-applications/inception_
87916544/87910968 [==============================] - 1s 0us/step
87924736/87910968 [==============================] - 1s 0us/step
```

```
[ ] inputs = keras.Input(shape = (150,150,3))
    x = tf.keras.applications.inception_v3.preprocess_input(inputs)
    x = base_model(x, training=False)
    x = keras.layers.GlobalAveragePooling2D()(x)
    x = keras.layers.Dropout(0.2)(x)
    outputs = keras.layers.Dense(1)(x)
    model = keras.Model(inputs,outputs)
```

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```
model.compile(optimizer='adam', loss =
tf.keras.losses.BinaryCrossentropy(from_logits = True),metrics =
keras.metrics.BinaryAccuracy())
model.fit(training_set, epochs = 20, validation_data = validation_set)
```

3. **Pantallazos app Django:**

Welcome to the Pet Classifier App

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dog prob 2.38181328313658e-05, cat prob 0.9999761581420898

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dog prob 6.911754553584615e-06, cat prob 0.999993085861206

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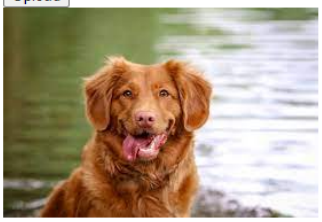

dog prob 0.9983475804328918, cat prob 0.0016524195671081543

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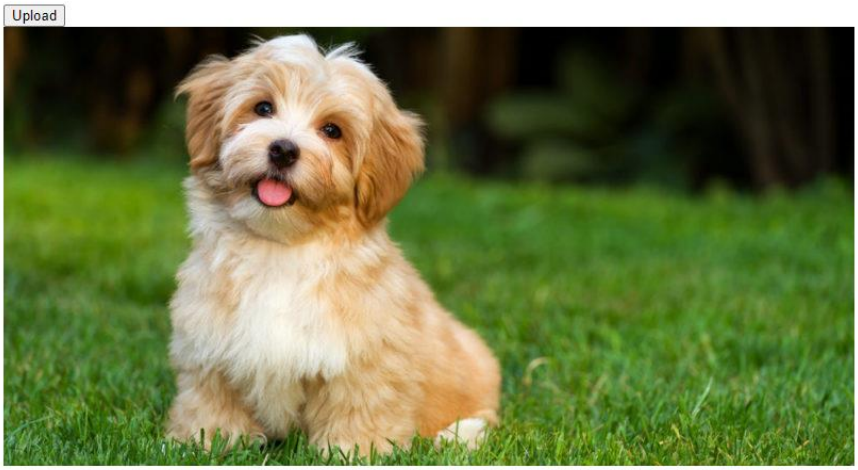

dog prob 0.891211986541748, cat prob 0.10878801345825195